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AMENDMENTS TO THE CLAIMS

This listing of the claims replaces all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS

Claims 1-6 (Previously Cancelled)

Claim 7. (Currently Amended) A centrifugal air/oil separation system substantially positioned inside a rotatable hollow shaft of an engine disposed substantially horizontally the system comprising:

an annular separating chamber defined co-axially within and radially spaced from the hollow shaft and adapted to rotate together with the hollow shaft;

a stationary annular cavity positioned at an end of the hollow shaft, communicating with a cavity of the engine disposed ~~outside the gearbox~~ a gearbox, for collecting an air/oil mixture therefrom such that the air/oil mixture is substantially isolated from contacting components inside the gearbox;

a mixture inlet passage defined between the annular cavity and the annular separating chamber, permitting the air/oil mixture in the annular cavity to enter the annular separating chamber for centrifugal separation;

an air outlet passage defined through the annular cavity, communicating the annular separating chamber for discharging air separated from the

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air/oil mixture in the annular separating chamber;
and
an oil outlet passage for discharging liquid oil
separated from the air/oil mixture in the annular
separating chamber into the annular cavity.

Claim 8. (Currently Amended) A centrifugal air/oil separation system as claimed in claim 7 wherein the annular separating chamber is sealingly mounted within and ~~radially spaced from~~ the hollow shaft, forming an annular passage defined between an interior of the hollow shaft and an exterior wall of the annular chamber, the annular passage being in communication with the annular separating chamber and the annular cavity, and forming a part of the oil outlet passage.

Claim 9. (Original) A centrifugal air/oil separation system as claimed in claim 8 wherein the annular separating chamber comprises a plurality of openings defined in the exterior wall thereof such that the liquid oil in the annular separating chamber under centrifugal forces enters the annular passage through the openings during rotation of the hollow shaft.

Claim 10. (Original) A centrifugal air/oil separation system as claimed in claim 7 wherein the hollow shaft is rotatably supported at the end thereof by the stationary annular cavity, and an end portion thereof extends axially into the annular cavity.

Claim 11. (Currently Amended) A centrifugal air/oil separation system as claimed in claim 10 wherein the

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hollow shaft comprises a plurality of holes defined in the end portion thereof extending into the annular cavity such that the liquid oil in ~~the annular~~ an annular passage under centrifugal forces enters the annular cavity during rotation of the hollow shaft.

Claim 12. (Original) A centrifugal air/oil separation system as claimed in claim 7 wherein the air outlet passage comprises a central axial passage defined within an interior wall of the annular separating chamber and a plurality of openings defined in the interior wall.

Claim 13. (Original) A centrifugal air/oil separation system as claimed in claim 12 wherein the interior wall extends axially into the annular cavity, forming at least a part of an annular interior of the annular cavity.

Claim 14. (Original) A centrifugal air/oil separation system as claimed in claim 12 wherein the openings defined in the interior wall of the annular separating chamber are located at an end distal from the annular cavity.

Claim 15. (Original) A centrifugal air/oil separation system as claimed in claim 7 wherein the air/oil mixture inlet passage comprises a plurality of openings defined in a radial wall of the annular separating chamber adjacent to the annular cavity.

Claim 16. (Original) A centrifugal air/oil separation system as claimed in claim 7 wherein the annular separating chamber comprises a packing disposed therein and

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adapted to rotate together with the annular separating chamber, the packing having a substantially rigid matrix adapted to inhibit collapse under centrifugal forces during rotation thereof, the matrix defining a plurality of flow passages permeable to the liquid oil and air for both axial and radial movement of the liquid oil and air therethrough.

Claim 17. (Original) A centrifugal air/oil separation system as claimed in claim 7 wherein the annular cavity comprises an outlet defined in a lower location of the annular cavity and being adapted for connection of a scavenging system.

Claim 18. (Original) A centrifugal air/oil separation system as claimed in claim 7 wherein the annular cavity comprises an inlet defined in one of a side wall and the cylindrical wall of the annular cavity and being adapted for connection of the cavity of the engine such that when the air/oil mixture from the cavity of the engine flows through the inlet into the annular cavity, the air/oil mixture is directed in a substantially axial direction through the annular cavity and the mixture inlet passage into the annular separating chamber.

Claim 19. (Previously Cancelled)

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